

Notice of Allowability

Application No.

10/524,055

Examiner

OLUMIDE T. AJIBADE AKONAI

Applicant(s)

KOSKINEN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/14/2010.
2. ☒ The allowed claim(s) is/are 1,4-13 and 17-28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date <u>08/26/2010</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alicia Choi on August 26, 2010.

The application has been amended as follows: (the inserted words/sentence is indicated in bold, and the deleted word is in brackets)

(Amended) **Claim 1.** A method, comprising: establishing an accounting session between a network element and a charging function for the session, wherein the network element comprises a gateway of an internet protocol based communication system; initiating a change in the accounting session on the initiation of the charging function; and charging for services in the communication system based on the accounting session, wherein the initiating a change in the accounting session occurs during an ongoing session and comprises detecting a change in charging for services by the charging function and transmitting a request to update the accounting session from the charging function to the network element, and wherein the initiated change comprises performing at least one of an increase and decrease in charges for services currently implemented

in the ongoing session, **wherein the transmitting the request comprises transmitting an update accounting request message.**

Claim 2: Cancel claim 2.

Claim 14. A charging element, comprising: a monitor unit configured to monitor charging in an internet protocol based communication system; an establishment unit configured to establish an accounting session with an application; an information unit configured to inform a network element configured to control an associated communication session of the accounting session, wherein the network element comprises a gateway of the internet protocol based communication system; and an initiation unit configured to initiate a change in the accounting session, said change occurring during an ongoing session, wherein the initiation unit comprises a detector configured to detect a change in charging for services by the charging function and a transmission unit configured to **[receive] transmit** a request to update the accounting session, and wherein the change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, **wherein the request comprises an update accounting request message.**

Claim 16: Cancel claim 16.

(Amended) **Claim 24.** A communication system, comprising: a network element configured to control a session for the provision of services in an internet protocol based communication system, wherein the network element comprises a gateway of the internet protocol based communication system; an application for the session; a control function for the session; and a charging function, wherein at least one accounting

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session is configured to be established between the charging function and at least one of the network element, the application, or the control function, and wherein the charging function is configured to initiate a change in the at least one accounting session during an ongoing session by detecting a change in charging for services by the charging function and transmitting a request to update the accounting session to the network element, and wherein the initiated change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, **wherein the request comprises an update accounting request message.**

(Amended) **Claim 27.** A charging element, comprising: monitor means for monitoring charging in an internet protocol based communication system; establishment means for establishing an accounting session with an application; information means for informing a network element configured to control an associated communication session of the accounting session, wherein the network element comprises a gateway of the internet protocol based communication system; and initiation means for initiating a change in the accounting session, said change occurring during an ongoing session, wherein the initiation means comprises detecting means for detecting a change in charging for services by the charging function and transmission means for **[receiving] transmitting a** request to update the accounting session, and wherein the change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, **wherein the request comprises an update accounting request message.**

(Amended) Claim 28: A computer program embodied on a non-transitory computer readable medium, the computer program being configured to control a processor to perform: establishing an accounting session between a network element and a charging function for the session, wherein the network element comprises a gateway of an internet protocol based communication system; initiating a change in the accounting session on the initiation of the charging function; and charging for services in the communication system based on the accounting session, wherein the initiating a change in the accounting session occurs during an ongoing session and comprises detecting a change in charging for services by the charging function and transmitting a request to update the accounting session from the charging function to the network element, and wherein the initiated change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, **wherein the request comprises an update accounting request message.**

Allowable Subject Matter

2. Claims 1, 4-14 and 17-28 allowed.
3. The following is an examiner's statement of reasons for allowance: Claims 1, 3, 4, 7-11, 13, 14, 16, 17, 20-22, 24, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wenzel et al 7,471,634 (hereinafter Wenzel)** in view of **Chaney 6,947,724**.

Regarding **claim 1**, Wenzel et al 7,471,634 discloses a method, comprising: establishing an accounting session between a network element (AAA

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server, see figs. 1 and 3, col. 7, lines 29-34) and a charging function (HA, see figs. 1 and 3, col. 7, lines 29-34) for the session (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55), wherein the network element comprises a gateway of an internet protocol based communication system (see figs. 1 and 3, col. 6, lines 17-29, col. 7, lines 29-34); initiating a change in the accounting session on the initiation of the charging function (transmitting a request to stop accounting for old FA, and transmitting a request to start accounting for the new FA when the mobile nodes moves from the old FA to the new FA, see fig. 8, col. 10, lines 20-50); and charging for services in the communication system based on the accounting session (see fig. 8, col. 10, lines 20-50). Chaney 6,947,724 discloses a 3GPP network (see fig. 1, col. 3, lines 58-60) comprising billing entities to initiate a charge to a user of a mobile node for a wireless communication session (see fig. 1, col. 6, lines 9-19), and wherein the charges can be increased or decreased during the wireless communication (see fig. 4, col. 6, lines 53-67, col. 7, lines 1-19).

The instant invention discloses wherein the initiating a change in the accounting session occurs during an ongoing session and comprises detecting a change in charging for services by the charging function and transmitting a request to update the accounting session from the charging function to the network, and wherein the initiated change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session; wherein the transmitting the request comprises transmitting an update accounting request message. The above novel features in combination with other limitations of the claim are neither taught

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suggested, nor made obvious by Wenzel, Chaney, or any other prior art of record.

Claims 4-13 are allowable by virtue of their dependency on claim 1.

Regarding **claims 14 and 27**, Wenzel et al 7,471,634 discloses a charging element (HA, see figs. 1 and 3, col. 7, lines 29-34), comprising: a monitor unit (or monitor means) configured to monitor charging in an internet protocol based communication system (see col. 7, lines 44-55); an establishment unit (or establishment means) configured to establish an accounting session with an application (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55); an information unit configured to inform a network element (AAA server, see figs. 1 and 3, col. 7, lines 29-34) configured to control an associated communication session of the accounting session, wherein the network element comprises a gateway of the internet protocol based communication system (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55); and an initiation unit (or initiating means) configured to initiate a change in the accounting session (transmitting a request to stop accounting for old FA, and transmitting a request to start accounting for the new FA when the mobile nodes moves from the old FA to the new FA, see fig. 8, col. 10, lines 20-50). Chaney 6,947,724 discloses a 3GPP network (see fig. 1, col. 3, lines 58-60) comprising billing entities to initiate a charge to a user of a mobile node for a wireless communication session (see fig. 1, col. 6, lines 9-19), and wherein the charges can be increased or decreased during the wireless communication (see fig. 4, col. 6, lines 53-67, col. 7, lines 1-19).

The instant invention discloses wherein the initiating unit comprises a detector configured to detect a change in charging for services by the charging function and a transmission unit configured to transmit a request to update the accounting session, and wherein the change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, wherein the request comprises an update accounting request message. The above novel features in combination with other limitations of the claim are neither taught suggested, nor made obvious by Wenzel, Chaney, or any other prior art of record. Claims 17-23 are allowable by virtue of their dependency on claim 14.

Regarding **claim 24**, Wenzel et al 7,471,634 discloses a communication system, comprising: a network element configured to control a session for the provision of services in an internet protocol based communication system (AAA server, see figs. 1 and 3, col. 7, lines 29-34), wherein the network element comprises a gateway of the internet protocol based communication system (see figs. 1 and 3, col. 6, lines 17-29, col. 7, lines 29-34); an application for the session (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55); and a charging function (HA, see figs. 1 and 3, col. 7, lines 29-34), wherein at least one accounting session is configured to be established between the charging function and at least one of the network element, the application, or the control function (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55), and wherein the charging function is configured to initiate a change in the at least one accounting session (HA transmitting a request to the AAA server stop accounting for the communication session

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on old FA, and transmitting a request to start accounting for the communication session on the new FA when the mobile nodes moves from the old FA to the new FA, see fig. 8, col. 10, lines 20-50). Chaney 6,947,724 discloses a 3GPP network (see fig. 1, col. 3, lines 58-60) comprising a control function (CSCF, see fig. 1, col. 3, lines 62-67) and billing entities to initiate a charge to a user of a mobile node for a wireless communication session (see fig. 1, col. 6, lines 9-19), and wherein the charges can be increased or decreased during the wireless communication (see fig. 4, col. 6, lines 53-67, col. 7, lines 1-19).

The instant invention discloses wherein the charging function is configured to initiate a change in the at least one accounting session during an ongoing session by detecting a change in charging by the charging function and transmitting a request to update the accounting session to the network element, and wherein the initiated change comprises performing at least one of an increase and decrease in charges for services currently implemented in the ongoing session, wherein the request comprises an update accounting request message. The above novel features in combination with other limitations of the claim are neither taught suggested, nor made obvious by Wenzel, Chaney, or any other prior art of record. Claims 25 and 26 are allowable by virtue of their dependency on claim 24.

Regarding **claim 28**, Wenzel et al 7,471,634 discloses a computer program embodied on a computer readable medium, the computer program being configured to control a processor to perform: establishing an accounting session between a network element (AAA server, see figs. 1 and 3, col. 7, lines 29-34) and a charging function (HA,

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see figs. 1 and 3, col. 7, lines 29-34) for the session (initiating accounting for a wireless communication session, see fig. 3, col. 7, lines 29-55), wherein the network element comprises a gateway of an internet protocol based communication system (see figs. 1 and 3, col. 6, lines 17-29, col. 7, lines 29-34); initiating a change in the accounting session on the initiation of the charging function (transmitting a request to stop accounting for old FA, and transmitting a request to start accounting for the new FA when the mobile nodes moves from the old FA to the new FA, see fig. 8, col. 10, lines 20-50); and charging for services in the communication system based on the accounting session, (HA transmitting a request to the AAA server stop accounting for the communication session on old FA, and transmitting a request to start accounting for the communication session on the new FA when the mobile nodes moves from the old FA to the new FA, see fig. 8, col. 10, lines 20-50). Chaney 6,947,724 discloses a 3GPP network (see fig. 1, col. 3, lines 58-60) comprising a control function (CSCF, see fig. 1, col. 3, lines 62-67) and billing entities to initiate a charge to a user of a mobile node for a wireless communication session (see fig. 1, col. 6, lines 9-19), and wherein the charges can be increased or decreased during the wireless communication (see fig. 4, col. 6, lines 53-67, col. 7, lines 1-19).

The instant invention discloses wherein the initiating a change in the accounting session occurs during an ongoing session and comprises detecting a change in charging for services by the charging function and transmitting a request to update the accounting session from the charging function to the network element, and wherein the initiated change comprises performing at least one of an increase and decrease in

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charges for services currently implemented in the ongoing session, wherein the request comprises an update accounting request message. The above novel features in combination with other limitations of the claim are neither taught suggested, nor made obvious by Wenzel, Chaney, or any other prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rygula et al 6,973,309 discloses a method and system for re-direction and handoff for pre-paid mobile services in third generation networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617